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STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ALBANY, NEW YORK 12233-1010

JUL 18 2013

Ms. Judith Enck
Regional Administrator
U.S. Environmental Protection Agency – Region 2
290 Broadway
New York, NY 10007-1866

Dear Ms. Enck:

Enclosed is a hard copy of New York's Annual Monitoring Network Plan (AMNP) for 2013. This is being submitted to EPA for review and approval. This document is also available online on DEC's website: http://www.dec.ny.gov/chemical/33276.html. Also enclosed is a copy of the notice of the availability for review of this network plan which was published in New York's Environmental News Bulletin (ENB) on May 15, 2013. This was available for review for 30 days. One comment was received that did not result in any changes in the proposed AMNP.

Please call Dave Shaw, Director of the Division of Air Resources, at (518) 402-8452 if you have any questions.

Sincerely,

Joseph J. Martens

Enclosures

c: R. Ruvo
M. Khan

2013

ANNUAL MONITORING NETWORK PLAN

New York State Ambient Air Monitoring Program

Bureau of Air Quality Surveillance
Division of Air Resources
New York State Department of Environmental Conservation

Table of Contents

Table of Contents (continued)

List of Tables

List of Figures

List of Acronyms and Abbreviations

AIRS	Aerometric Information Retrieval System
AQI	Air Quality Index
AQS	Air Quality System
AMoN	Ammonia Gas Monitoring Network
ARM	Approved Regional Method
ASRC	Atmospheric Sciences Research Center
BAQS	Bureau of Air Quality Surveillance
CAMR	Clean Air Mercury Rule
CASTNet	Clean Air Status and Trends Network
CBSA	Core-Based Statistical Area
CCNY	City College of New York
CFR	Code of Federal Regulations
CMSA	Consolidated Metropolitan Statistical Area
CO	Carbon Monoxide
Cr	Chromium
CSN	Chemical Speciation Network
CTDEP	Connecticut Department of Environmental Protection
DNPH	2,4-Dinitrophenyl hydrazine
EAC	Early Action Compact
EC	Elemental Carbon
EPA	Environmental Protection Agency
FEM	Federal Equivalent Method
FRM	Federal Reference Method
GC	Gas Chromatography
GCMS	Gas Chromatography/Mass Spectrometry
HAPs	Hazardous Air Pollutants
HPLC	High Performance Liquid Chromatography
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
IMPROVE	Interagency Monitoring of Protected Visual Environments
MDN	Mercury Deposition Network
NAAQS	National Ambient Air Quality Standards
NADP	National Atmospheric Deposition Program
NATTS	National Air Toxics Trends Stations
NCore	National Core
NESCAUM	New England States Coordinated Air Use Management
NJDEP	New Jersey Department of Environmental Protection
NO	Nitric oxide
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NO_y	Sum of reactive nitrogen oxides
NSR	New Source Review
NYC	New York City
NYCRR	New York State Codes, Rules and Regulations

NY29 Moss Lake
NY52 Bennett Bridge
NY67 Ithaca
NY68 Biscuit Brook
NY96 Cedar Beach, Southold
NY99 West Point

Figure 7.1 shows NADP sites operated by DEC as well as other collaborating partners in New York State.

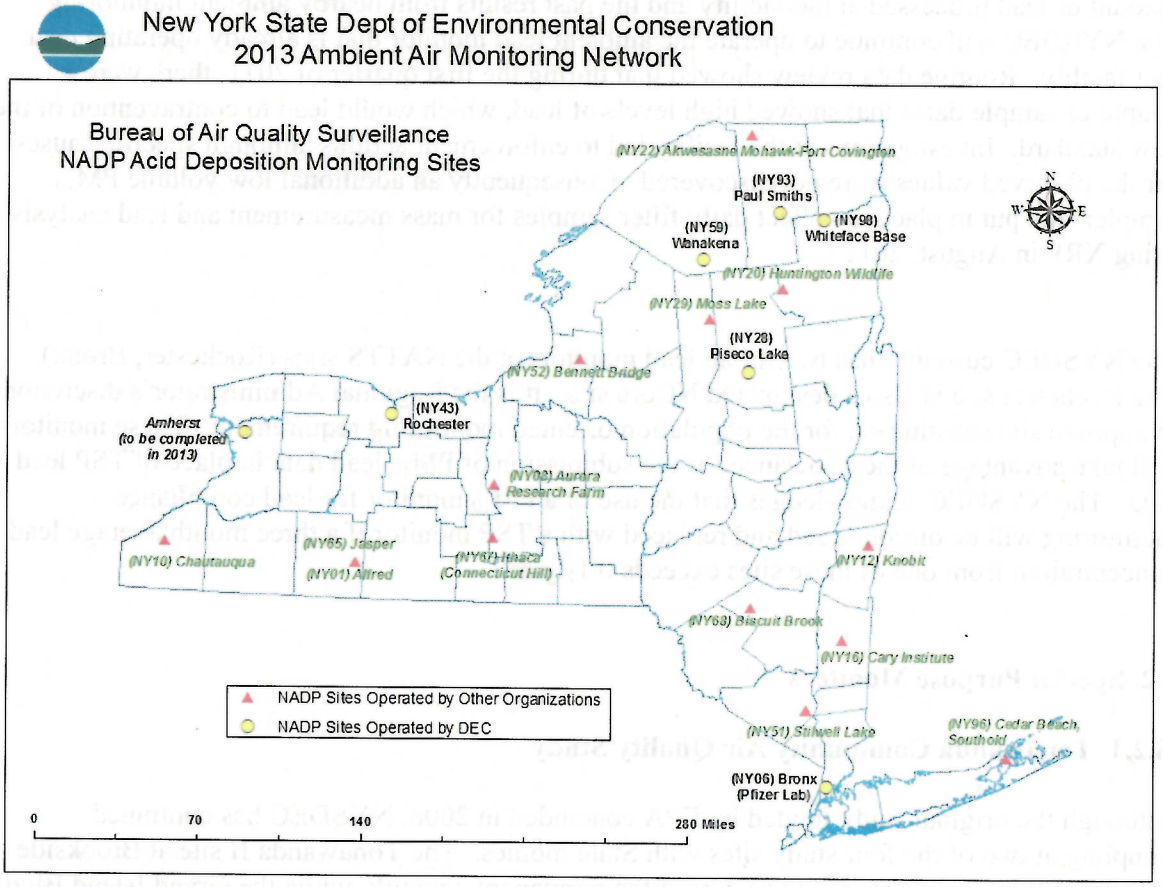

Figure 7.1 Location Map of Acid Deposition Monitoring Sites in New York State

8. Anticipated Changes in the Next 18 Months

8.1 Lead Monitoring

Revisions to the monitoring requirements became effective January 26, 2011. The new regulations replaced the population oriented monitoring requirement with a requirement to add Pb monitors to the urban NCore monitors. The EPA also lowered the emission threshold from 1.0 tpy to 0.50 tpy for industrial sources of lead (e.g., lead smelters and foundries). One source located in Orange County was determined to have the potential to violate the standard due to the amount of lead processed at the facility and the past results from nearby ambient monitoring. The NYSDEC will continue to operate the ambient lead monitor that is already operating near that facility. Routine data review showed that during the first quarter of 2011, there were a couple of sample dates that showed high levels of lead, which would lead to contravention of the new standard. Investigations at the facility led to enforcement actions although specific causes for the observed values were not discovered. Consequently an additional low volume PM_{10} sampler was put in place to collect daily filter samples for mass measurement and lead analysis using XRF in August, 2011.

The NYSDEC currently has two urban lead monitors at the NATTS sites (Rochester, Bronx). The Rochester site is also a designated NCore site. It is the Regional Administrator's discretion to approve site substitution for the population oriented monitoring requirement. These monitors will take advantage of the allowance for the submission of PM_{10} lead data in place of TSP lead data. The NYSDEC acknowledges that the use of a PM_{10} monitor for lead compliance monitoring will be discontinued and replaced with a TSP monitor if a three month average lead concentration from one of these sites exceeds $0.1 \mu g/m^3$.

8.2 Special Purpose Monitors

8.2.1 Tonawanda Community Air Quality Study

Although the original study funded by EPA concluded in 2008, NYSDEC has continued sampling at two of the four study sites with State monies. The Tonawanda II site at Brookside Terrace will remain in operation as part of the permanent network, while the Grand Island Blvd. industrial site will be maintained as a special purpose monitor, resources permitting. Figures 8.1 and 8.2 illustrate trend charts for benzene and formaldehyde demonstrating emission reductions.

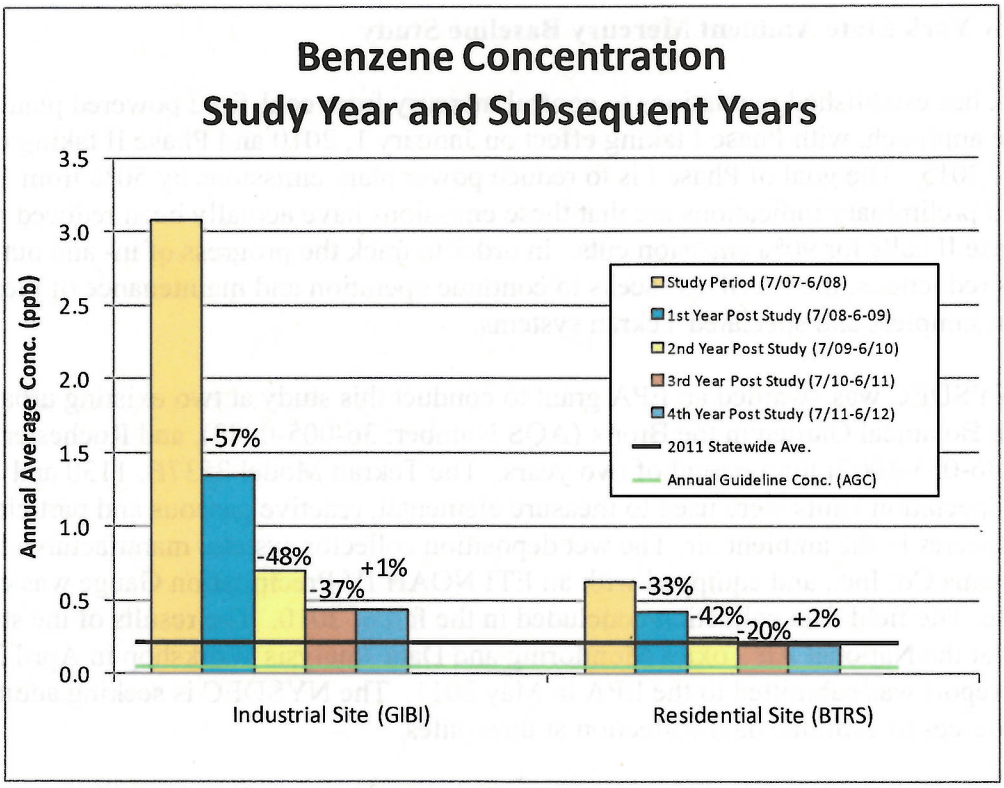

Figure 8.1 Annual Averages for Benzene at Tonawanda Sites

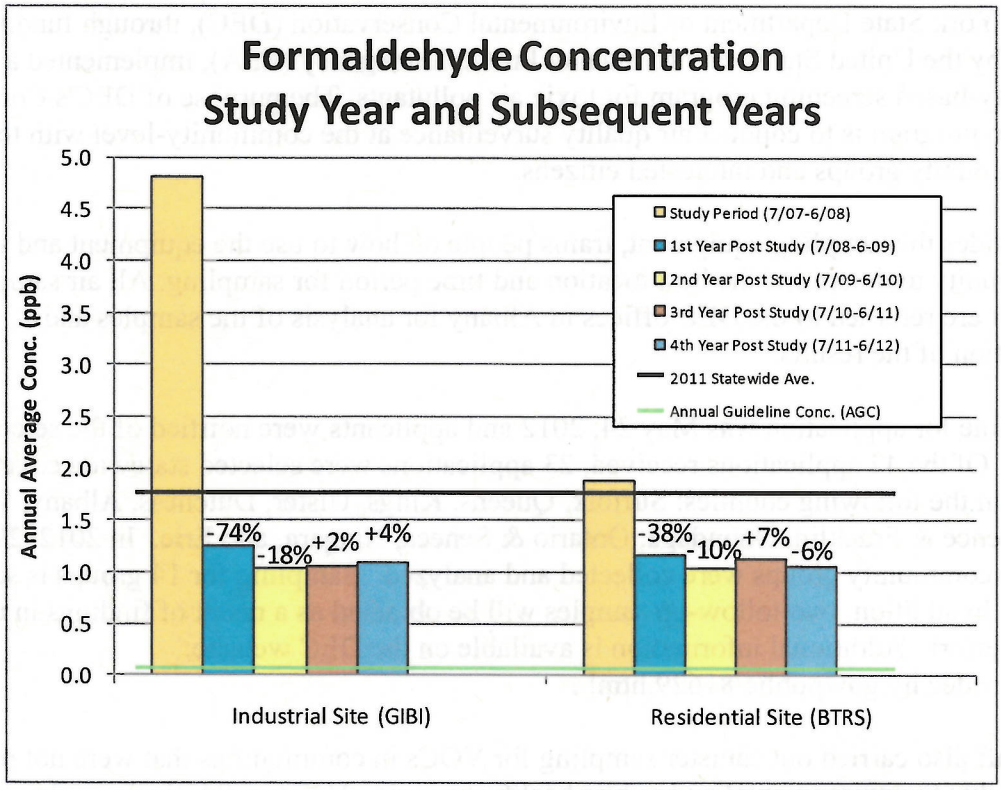

Figure 8.2 Annual Averages for Formaldehyde at Tonawanda Sites

8.2.2 New York State Ambient Mercury Baseline Study

New York has established regulations to control mercury from coal-fired powered plants in a two-phase approach, with Phase I taking effect on January 1, 2010 and Phase II taking effect on January 1, 2015. The goal of Phase I is to reduce power plant emissions by 50% from 1999 levels, and preliminary indications are that these emissions have actually been reduced by about 65%. Phase II calls for 90% emission cuts. In order to track the progress of in- and out-of-state emissions reductions, the NYSDEC seeks to continue operation and maintenance of mercury wet deposition samplers and speciated Tekran systems.

In 2008 NYSDEC was awarded an EPA grant to conduct this study at two existing urban sites: New York Botanical Garden in the Bronx (AQS Number: 36-005-0083), and Rochester (AQS Number: 36-055-1007) for a period of two years. The Tekran Model 2537B, 1130 and 1135 Mercury Speciation Units were used to measure elemental, reactive gaseous and particle bound mercury species in the ambient air. The wet deposition collector system, manufactured by N-CON Systems Co. Inc., and equipped with an ETI NOAH IV Precipitation Gauge was collocated at each site. The field data collection concluded in the fall of 2010. The results of the study were presented at the National Air Toxics Monitoring and Data Analysis Workshop in April 2011. The final report was submitted to the EPA in May 2011. The NYSDEC is seeking additional funding sources to continue data collection at these sites.

8.2.3 Community Air Screen Program

The New York State Department of Environmental Conservation (DEC), through funding provided by the United States Environmental Protection Agency (EPA), implemented a community-based screening program for toxic air pollutants. The purpose of DEC's Community Air Screen program is to conduct air quality surveillance at the community-level with the help of local community groups and interested citizens.

DEC provides the sampling equipment, trains people on how to use the equipment and work with the community to determine the best location and time period for sampling. All air sampling equipment are returned to the DEC offices in Albany for analysis of the samples and interpretation of the results.

The deadline for application was May 24, 2012 and applicants were notified of the selection June 25, 2012. Of the 42 applications received, 23 applications were selected statewide covering locations in the following counties: Suffolk, Queens, Kings, Ulster, Dutchess, Albany, Warren, St. Lawerence & Franklin, Onondaga, Ontario & Seneca, Niagara, and Erie. In 2012, 29 samples from nine community groups were collected and analyzed. Sampling for 14 groups is scheduled for 2013. In addition, two follow-up samples will be obtained as a result of findings in the 2012 sampling effort. Additional information is available on the DEC website: http://www.dec.ny.gov/public/81629.html .

BAQS staff also carried out canister sampling for VOCs in communities that were not part of this study due to environmental and public health concerns. Various duration samples such as

grab, 1-hr, as well as 24-hr were obtained and analyzed by our laboratory. Areas studied included Throgs Neck, Attica, and Camillus.

8.2.4 Airport Lead Monitoring

Under the 2011 lead rule monitoring is required for a minimum of one year at 15 additional airports that have been identified as having characteristics that could lead to ambient lead concentrations approaching or exceeding the lead NAAQS. Brookhaven (36-103-0024) and Republic (36-103-0005) airports in Suffolk County, New York have been designated as such. A 12-month monitoring study at Brookhaven Airport concluded in October, 2012 and all data were submitted to AQS. The Republic Airport monitoring did not start until October, 2012 due to protracted site lease negotiations.

8.2.5 Peace Bridge Air Quality Study

Partnering with the Buffalo and Fort Erie Public Bridge Authority (PBA), Bureau staff initiated an air quality study in the vicinity of the Peace Bridge in August, 2012. Two monitoring sites, one upwind (Front Park) and the other downwind (Busti Ave), were established for the measurement of fine particulate matter, elemental sulfur, metals, and black carbon. A meteorological station was also installed at the Busti Ave site. A six-month monitoring effort was concluded prior to the construction of the Plaza to establish baseline levels. A second six-month campaign will be carried out after the construction is completed.

8.2.6 Hurricane Sandy Clean-up Activities Monitoring

In response to air quality concerns in Hurricane Sandy recovery areas (lower Hudson Valley, New York City and Long Island), BAQS Albany and Region 2 staff established supplemental monitoring sites for continuous monitoring for $PM_{2.5}$ beginning in November, 2012. Initially EPA provided 3 MetOne EBAM nephelometers that were installed at Mill Basin, Rockaway Beach, and Gerritsen Beach. Subsequently three more sites were added using DEC continuous gravimetric $PM_{2.5}$ monitors (TEOM) at Lower Manhatten, Rockaway PS 114, and Midland Beach. Except for the Midland Beach site in Staten Island, monitoring at all other sites has been suspended as recovery activities have concluded.

8.3 Proposed Changes at Existing Sites

As part of the new requirements specified in the revised Monitoring Regulations Parts 53 and 58, a network assessment was performed to determine "if the network meets the monitoring objectives defined in appendix D to this part, whether new sites are needed, whether existing sites are no longer needed and can be terminated, and whether new technologies are appropriate for incorporation into the ambient air monitoring network." As a result of this exercise, NYSDEC is proposing the following modifications to the existing network.

8.3.1 PS 19

Discontinue redundant PM_{10} monitoring as there is already a monitor at the Division Street site. In January, 2013 DEC submitted to EPA requesting that clean data finding for New York County for the 1987 PM_{10} NAAQS be made. Data have demonstrated that New York County was in attainment of the PM_{10} NAAQS when EPA designated it as nonattainment in 1994, and has never had an exceedance of the NAAQS since being so designated.